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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/005,573	12/06/2001	Jean Viaud	08987-US	7998	
7590 05/25/2005			EXAM	EXAMINER	
Jimmie R. Oaks			ALBERTALLI, BRIAN LOUIS		
Patent Departm			ADTIBUT	DARED MILABED	
DEERE & CON			ART UNIT	PAPER NUMBER	
One John Deere Place			2655		
Moline, IL 61265-8098			DATE MAILED: 05/25/200:	DATE MAILED: 05/25/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application N	o. Applicant(s)				
Office Asking Comment	10/005,573	VIAUD, JEAN				
Office Action Summary	Examiner	Art Unit				
	Brian L Alberta	•				
The MAILING DATE of this communi Period for Reply	cation appears on the cov	er sheet with the correspondence	address			
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNION. - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this common of the period for reply specified above is less than thirty (30). - If NO period for reply is specified above, the maximum stathas a specified above, the maximum stathas and the period for reply within the set or extended period for reply within the set of extended period for reply set.	CATION. of 37 CFR 1.136(a). In no event, ho unication. of 37 days, a reply within the statutory relatory period will apply and will expivill, by statute, cause the application.	wever, may a reply be timely filed ninimum of thirty (30) days will be considered to the SIX (6) MONTHS from the mailing date of the to become ABANDONED (35 U.S.C. § 133).	mely. is communication.			
Status						
1) Responsive to communication(s) filed	d on					
2a)⊠ This action is FINAL . 2	b) This action is non-fi	nal.				
3) Since this application is in condition f	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practic	e under <i>Ex parte Quayle</i>	, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-5</u> is/are pending in the ap	olication.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-5</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restrict	ion and/or election requi	ement.				
Application Papers						
9)☐ The specification is objected to by the	Examiner.					
10) The drawing(s) filed on is/are:	a) accepted or b) o	bjected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including	the correction is required if	the drawing(s) is objected to. See 37	CFR 1.121(d).			
11) ☐ The oath or declaration is objected to	by the Examiner. Note th	ne attached Office Action or form	PTO-152.			
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim f	or foreian priority under 3	35 U.S.C. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:	3 μ ,	3(2) (3)(1)				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)		·				
1) Notice of References Cited (PTO-892)	٨Γ	Interview Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (P7	rO-948)	Paper No(s)/Mail Date				
 Information Disclosure Statement(s) (PTO-1449 or F Paper No(s)/Mail Date 	PTO/SB/08) 5) L 6) [☑ Notice of Informal Patent Application (I ☑ Other:	PTO-152)			
I.S. Patent and Trademark Office						
PTOL-326 (Rev. 1-04)	Office Action Summary	Part of Paper No./Ma	il Date 05192005			

DETAILED ACTION

Response to Amendment

1. The amendments to the claims have been entered. Claims 2 and 4 are currently amended.

Response to Arguments

2. Applicant's arguments filed January 28, 2005 have been fully considered but they are not persuasive.

The Applicant has argued (see page 5, 2nd paragraph of Applicant's arguments) that because Fujioka et al. disclose an excavator which is controlled remotely, it would not have been obvious to modify DenBraber et al. for remote operation using a speech recognition device.

However, as admitted by the Applicant, DenBraber et al. disclose that the controller 200 sends signals to hydraulic controls 230a, 230b, and 230c, in response to control inputs of a data input interface 290, the data input interface 290 comprising speech recognition devices and further being coupled to the controller 200. DenBraber et al. do not specifically teach that the speech recognition capabilities of data input interface 290 are used to directly control the hydraulic controls (through commands such as "move up" or "move down").

Fujioka et al. teach that, like any speech recognition device used for controlling physical devices, input speech commands are converted to control signals. Fujioka et al. further disclose that speech commands can be used to control an excavator, which

necessarily has a "load bearing member" which can be lifted or lowered. The fact that the speech recognizer of Fujioka et al. is remotely located is irrelevant, because Fujioka et al. has been relied upon solely for the teachings that when a speech recognizer is used to control a physical device, the speech recognizer necessarily converts spoken commands into appropriate control signals and sends them to a controlling device.

Therefore, the obviousness rejection of claim 1 is not based on the modification of DenBraber et al. for remote operation, but rather, that it would have been obvious to one of ordinary skill in the art at the time of invention to modify DenBraber et al. to use the speech recognition capabilities of the data input interface 290 to directly control the hydraulic controls 230a, 230b, and 230c.

Therefore, the rejections made in the previous Office Action stand.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over DenBraber et al. (U.S. Patent 6,131,061), in view of Fujioka et al. (Japanese Patent Application 2000-56827).

In regard to claim 1, DenBraber et al. discloses a combination of a tractor (Fig. 1, work machine 100) and a loader mounted on the tractor (implement 110) and including at least one load bearing member (bucket 150) mounted for being raised and lowered by operation of at least one powered device (hydraulic cylinders 170, 180, 190) coupled to the load bearing member, the improvement comprising: an adjusting device (Fig. 2, controller 200) coupled to said powered device and being operable for either lifting or lowering said load bearing member in response to receiving appropriate control signals (operator control device 280 provides input to controller 200, which moves the implement 110, column 4, lines 3-9).

DenBraber et al. further acknowledges that speech recognition devices can be used as input devices (column 4, lines 14-17).

DenBraber et al. does not disclose that a speech recognition device is coupled to said adjusting device for transmitting said appropriate control signals thereto in response to receiving appropriate voice commands from an operator.

Fujioka et al. discloses a speech recognition device (Fig. 1, 221) which is in communication with an adjusting device (operation command converting means 222) for transmitting said appropriate control signals thereto in response to receiving appropriate voice commands from an operator (speech instruction recognizing means 221

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recognizes a speech instruction and operation converting means 222 converts the recognition result to an operation command for construction machine 10, page 3, lines 5-11).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the control operator device 280 of DenBraber et al. to include a speech recognizer to control the operation of the implement 110, since this would ensure both hands of the user could remain on the steering wheel, which increases the safety for the user.

In regard to claim 2, DenBraber et al. discloses a position sensing device (position sensor system 220) mounted for sensing the position of said load bearing member (bucket 150) and producing a position signal representative of said position; said sensing device being coupled to said adjusting device (controller 200) for halting movement of said load bearing member at a pre-selected position (allowable implement movement data values) corresponding to said position signal (position sensors 240a, 240b, and 240c return information to controller 200 through implement signal 245, column 3, lines 21-23; the position of the implement 110 is halted before leaving the space of allowable implement movement, column 5, lines 41-49).

In regard to claim 4, neither DenBraber et al. nor Fujioka et al. disclose an activating device coupled to said speech recognition device for selectively activating the latter.

Official notice is taken that it is notoriously well known and recognized in the art to include an activating device with a speech recognition device when a speech recognition device is going to be used in a high noise environment. A speech recognition device mounted on a tractor would be subject to substantial engine noise, wind noise, and noise generated by the load-bearing device striking the ground.

It would have been obvious to one of ordinary skill in the art at the time of invention to further modify the combination of DenBraber et al. and Fujioka et al. to include an activating device coupled to the speech recognition device, since, as is well known in the art, a manual activating device significantly decreases the number of incorrect recognition results that occur in a high noise environment.

In regard to claim 5, the combination of DenBraber et al. and Fujioka et al., as discussed in reference to claim 1, discloses in Fujioka et al. that the adjusting device includes a manually-operable device (backup remote control units 201) for effecting the operation of said powered device exclusive of said recognition device (backup remote control unit 201 is used to execute manual operation of construction machine 10, page 10, lines 2-5).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over DenBraber et al., in view of Fujioka et al., and further in view of Duvall (U.S. Patent 5,704,008).

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The combination of DenBraber et al. and Fujioka et al., as applied to claim 1, above, discloses in Fujioka et al. that the speech recognition device includes a memory (storage means 221B, page 3, lines 22-25).

Neither DenBraber et al. nor Fujioka et al. disclose that the memory stores information by which different operators are identified, with said speech recognition device sending out control signals only in response to voice commands of a recognized operator.

Duvall discloses a system for a vehicle that recognizes the voice of a recognized operator (owner) and only activates the vehicle in response to the commands of a recognized user (column 4, lines 57-64).

It would have been obvious to one of ordinary skill in the art at the time of invention to further modify the combination of DenBraber et al. and Fujioka et al. to only send out control signals in response to the voice commands of a recognized user in order to prevent unauthorized users from controlling the load bearing member, who may not be properly trained on the particular tractor, thereby ensuring the safety of the user and others around the tractor.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian L Albertalli whose telephone number is (571) 272-7616. The examiner can normally be reached on Mon - Fri, 8:00 AM - 5:30 PM, every second Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BLA 5/19/05

DAVID L. OMETZ PRIMARY EXAMINER